

Uplink Protocol Analyzer For Low-Power Long Range Networks

Utilizing Unbounded Lab's proprietary 8-Channel RF Concentrator, the Uplink Protocol Analyzer can intercept LoRa®-based and LoRaWAN™ networks traffic in the 915MHz and 868MHz bands, and utilize the industry standard Wireshark network protocol analyzer's multiple analysis capabilities.

Uplink Protocol Analyzer

The individual 8-Channel RF Concentrator for LoRa®-based networks has two radios, each capable of listening on a frequency range up to 800kHz. The 8-Channel RF Concentrator has eight single-channel 125kHz bandwidth receivers per device, each of which can be assigned to either one of the two radios. Unbounded Lab's Uplink Protocol Analyzer allows for custom radio configurations to be saved and loaded to the device and the hard disk.

The Uplink Protocol Analyzer only receives non-spectrally-inverted frames on a particular channel, limiting it to receiving uplinks in a LoRaWAN™ network. For arbitrary LoRa®-based network traffic, the polarity must match that of the receivers. Additionally, as the receivers only receive 125kHz bandwidth traffic, listening to 500kHz BW traffic, which means the 8 US 500kHz BW downlink channels (923.3 - 927.5MHz), is currently not supported.

Unbounded Lab's Uplink Protocol Analyzer allows for an arbitrary number of hardware devices to be connected, allowing the user to listen on all 64 US 125kHz uplink channels using eight devices. The software runs on Windows-based computers (Windows 8, 10 confirmed) and currently supports both



Compatible with

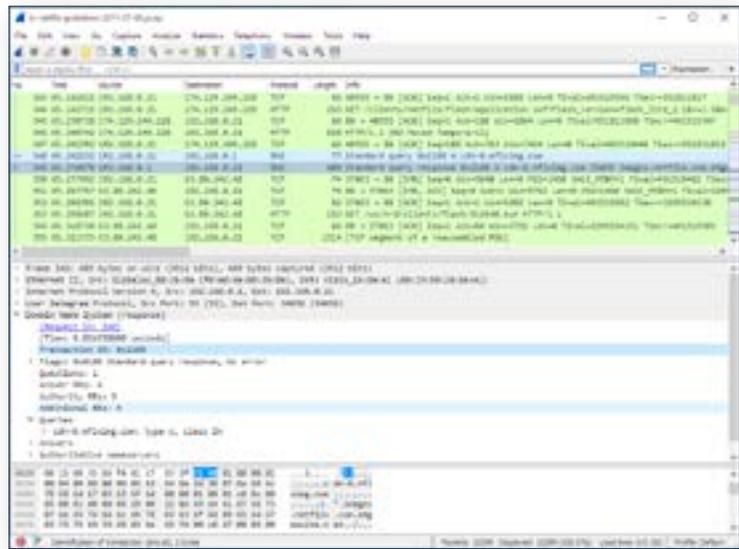


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About Wireshark

Wireshark is the world's foremost and widely-used network protocol analyzer. It lets you see what's happening on your network at a microscopic level and is the de facto (and often de jure) standard across many commercial and non-profit enterprises, government agencies, and educational institutions. Wireshark development thrives thanks to the volunteer contributions of networking experts around the globe and is the continuation of a project started by Gerald Combs in 1998.



Wireshark has a rich feature set which includes the following:

- Live capture and offline analysis.
- Standard three-pane packet browser
- Captured network data can be browsed via a GUI, or via the TTY-mode TShark utility.
- The most powerful display filters in the industry.
- Decryption support for many protocols, including IPsec, ISAKMP, Kerberos, SNMPv3, SSL/TLS, WEP, and WPA/WPA2
- Coloring rules can be applied to the packet list for quick, intuitive analysis
- Output can be exported to XML, PostScript®, CSV, or plain text
- And much more...